



CHEMISTRY

BOOKS - UNITED BOOK HOUSE

MODEL QUESTION PAPER 20

Exercise

1. If the energy of an electron in the ground state of hydrogen atom be 13.6 eV then its ionisation potential is—

A. 27.2 eV

B. -13.6eV

C. 13.6 eV

D. -27.2eV

Answer:



Watch Video Solution

2. Exceptional Octate found in—

A. CH_4

B. CO

C. C_2H_6

D. CO_2 .

Answer:



Watch Video Solution

3. Unpaired electron exist in—

A. KO_2

B. Al_2O_3

C. NO_2

D. Ca

Answer:



Watch Video Solution

4. Molecular weight of gas whose diffusion rate is half of methane:

A. 32

B. 64

C. 48

D. 16

Answer:



Watch Video Solution

5. For spontaneous process—

A. $\Delta S_{Total} = \text{positive}$

B. $\Delta S_{sys} = \text{positive}$

C. $\Delta S_{Total} = \text{Negative}$

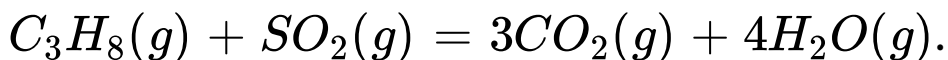
D. $\Delta S_{sys} = \text{Negative}$

Answer:



Watch Video Solution

6. $\Delta H - \Delta U$ for the reaction



A. $+4RT$

B. $-3RT$

C. $2RT$

D. 5 RT

Answer:



Watch Video Solution

7. Active mass refers to:

A. Specific Gravity

B. Equivalent wt

C. Moleculer wt

D. Moler Concentration

Answer:



Watch Video Solution

8. Which one is formed in the reaction between NaH and H_2O .

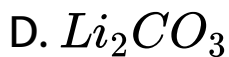
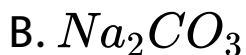
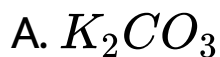


Answer:



Watch Video Solution

9. Thermal stability is highest for the
Compound:



Answer:



Watch Video Solution

10. NO of double bond possible for C_5H_8 .

A. 2

B. 4

C. 3

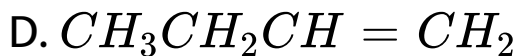
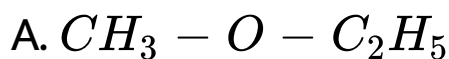
D. 5

Answer:



Watch Video Solution

11. Which one can show functional isomerism :



Answer:



Watch Video Solution

12. HBr antimarcowni koff deoes not observed

in:

A. C_4H_8

B. pent - 2 ene

C. but - 2-ene

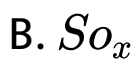
D. propene

Answer:



Watch Video Solution

13. Chlorosis is caused by —

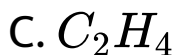
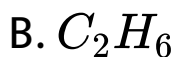


Answer:



Watch Video Solution

14. Which of the following reacts with ammoniacal $AgNO_3$ solution:



Answer:



Watch Video Solution

15. What is empirical formula?



[Watch Video Solution](#)

16. What is the mass of 1 millimole NH_3 ?



[Watch Video Solution](#)

17. Give four defects of 'Mendeleev's periodic table.



[Watch Video Solution](#)

18. What is internal energy?



Watch Video Solution

19. What do you mean by adiabatic process?



Watch Video Solution

20. State one demerit of wurtz reaction?



Watch Video Solution

21. State Dulong-petits law 1 write one limitation of it.



[Watch Video Solution](#)

22. If the equivalent weight of the metal M be x in M_mO_n . Find its atomic weight in terms of n , m and x .



[Watch Video Solution](#)

23. What is Quantum Numbers?



Watch Video Solution

24. Calculate the kinetic energy of an electron having potential energy 1.5 eV. in SI unit.



Watch Video Solution

25. Why graphite is slippery? What is aquadag?



Watch Video Solution

26. Which one is weak acid and why?

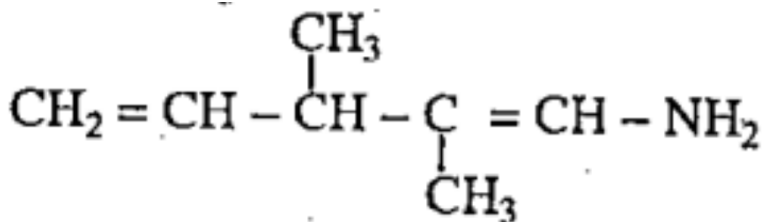
$I\text{CH}_2\text{COOH}$, BrCH_2COOH , ClCH_2COOH

.



Watch Video Solution

27. Give the IUPAC name of the following:





Watch Video Solution

28. What is acid rain?



Watch Video Solution

29. Write three defects of Bohr theory?



Watch Video Solution

30. What is magnetic quantum number? If the principle quantum number be 4 find the azimuthal quantum numbers for the same.



Watch Video Solution

31. What do you mean by electron affinity? State its change down a group.



Watch Video Solution

32. Arrange the Cations as per increasing radius $Mg_{(2+)}$, $Na^{(o+)}$ & $Al^{(3+)}$ What do you mean by covalent radius.



Watch Video Solution

33. What is polarising power? What shall be the increasing order of polarising power of Mg^{2+} , Na^{\oplus} & Al^{3+} ? .



Watch Video Solution

34. Find the increasing order of covalent nature of $AlCl_3$, $MgCl_2$ and NaCl. What is Ionisation potential.



Watch Video Solution

35. Define Co-efficient of Viscosity of a liquid.
Write its S.I Unit.



Watch Video Solution

36. Calculate q , w & Δu when a gas is compressed from 15 lit to 5 lit at 5 atmospheric pressure in isothermal irreversible process.



Watch Video Solution

37. Write Hess's law of constant heat summation. Write the mathematical expression for entropy.



Watch Video Solution

38. Balance the following reaction by oxidation

no method $H_2O + HNO_2 \rightarrow H_2O + HNO_3$.



Watch Video Solution

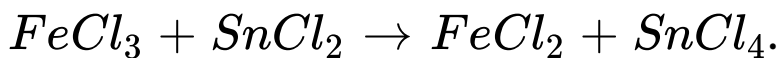
39. Balance the following reaction by oxidation

no method $Cu + NO \rightarrow CuO + N_2$



Watch Video Solution

40. Balance the following reaction by oxidation no method



Watch Video Solution

41. State one method to remove permanent hardness of water. Why H_2S is a gas at ordinary room temperature?



Watch Video Solution

42. Why CsI is less soluble in water? What is used as anode in the extraction of Na in Down process?



Watch Video Solution

43. How N_2 is estimated in Duma's process.



Watch Video Solution

44. What is self Catalysis? Write Arrheneous equ for the specific rate constant of a reaction. Find $d\frac{A}{dt} : dB / dt$ for the reaction $2A \rightarrow 3B$



Watch Video Solution

45. Write ostwald dilution law 1 what is buffer solution? State with example, the activity of an acidic buffer- solution.



Watch Video Solution

46. Boric acid is a weak acid, but in presence of Glycerol, it acts as a strong acid why?



[Watch Video Solution](#)

47. State reasons $:CF_6^{2-}$ does not form but SiF_6^{2-} forms write Chemical for rule of 'Borax.



[Watch Video Solution](#)

48. What happens when: $LiBH_4$ is reacted with BF_3 in dry ether medium. What is inorganic Graphaite?



Watch Video Solution

49. What happens when: CO_2 gas is passed through BaO_2 Suspension in water. What is inorganic Graphaite?



Watch Video Solution

50. What is Ziegler natta Catalyst? State one use of it. State with example Markownikoffs rule.



Watch Video Solution

51. How would you differ,Chemically ethane & ethylene.



Watch Video Solution

52. How would you differ, Propyne & acetylene.



Watch Video Solution

53. What is P-2 Catalyst?



Watch Video Solution